

their great recommendation of cheapness, at the same time possessing all the advantages of firmness and convenience, and in having given great satisfaction when done.

Figs. 3 and 4 are the plan and section of the same room, fitted up in a different manner, that is, with the desks and forms standing independent of the walls. The difference of this from the other consists in the forms and desks both having cut metal brackets from the floor; also in the cost being more and the accommodation less, it being calculated at desks and forms for 52 boys, and moveable forms for 28; total, 80 boys. The Board therefore chose the other plan.

These fittings belong to the above-named workhouse, in which some very extensive additions and improvements have recently been made, from the designs and under the directions of Mr. Henry Ward, an eminent practical architect; and as the establishment is now in most respects considered quite a model, I will, if agreeable to you, at some future time send you the principal plans, and elevations, from which these minor plans of the fittings will be better understood. My next subject will be the dining-hall and chapel, which I will forward to you as soon as my professional engagements will permit.

THE AERIAL MACHINE.

There is a very clever hoax on foot just now, in the shape of a circumstantial account of an ascent of the aerial machine from Glasgow, by which the conductors of the *Atlas* have been deceived, and through them other papers, such as the *Times* and the *Herald*, to so far as giving currency to the report. A Professor Gwella—which we read as a corruption of God-wills, so omnipotent a personage did we deem him to be on first scanning the account—was said to have started from some elevated "Dumb Cliff"—which we suppose is typical of the dumb elf in which the account was calculated to make many persons sing—and to have risen at his first observation to some 950 feet, just it was said as his previous calculations had led him to conclude would be the case at this identical point of progress, that he pushed on, rising rapidly, and after some minutes of account, found himself at an altitude of nearly three miles, and feeling a little uncomfortable from the rarity and keenness of the atmosphere—his steam engine also became uncomfortable, and for want of its manager's sympathetic attentions to the safety-valve, three pipes of the tubular-boiler gave tokens of uneasiness by bursting. This, however, with the succession of explosions from other of the tubes did not, according to our traveller's account, disconcert him greatly, for, under the management of the "fun-tail," he had taken measures for a leisure descent to the earth, but unfortunately, and just as day was breaking—for it should be stated that he took the precaution of a sound experimentalist, to start at a secret hour, about half-past three in the morning—from the Dumb Cliff, so that there were no babbling speculators and betting men, clamouring to disconcert or waiting to laugh at his failure—just as day was breaking, one of the exploding pipes struck a part of the frame-work of the wings, and so "winged" the quarry; upon which the noble bird came toppling and curvetting down, and our professor's consciousness of events departed until he found himself in bed, under care of nurse and doctor; the machine was gone to "davy's locker," that is, it was sunk in the sea, where our professor was picked up by some considerate captain, and so was nicely disposed of for all the purposes of the narrative; but our professor, nothing daunted, was made to wind up the tale by avowing his perfect readiness to make another attempt. We doubt it not, and that he is not the first of the clever and adventurous craft who are disposed to aim at "shooting the moon" after this fashion.

All this is very amusing, but we can imagine that it is not a little provoking to the conductors of so respectable a journal as the *Atlas* to have been so grossly duped and hoaxed. We hear, by the way, that Mr. Henson is in a condition to put out to the air, if necessary, in three weeks' time. For this we have good authority.

TO THE ARTIFICERS OF YORK, ESPECIALLY THOSE EMPLOYED IN BUILDING.

"FELLOW CITIZENS!

"PERMIT me to address a few words to you respecting the *School of Design*, which, through the liberality of government and of the inhabitants of this city and vicinity, has been established among you.

"Of the success of the institution I never entertained any doubt, but while the attendance of pupils since its commencement has been very gratifying, I cannot refrain from expressing my surprise and regret that scarcely any artificers connected with the various branches of building have availed themselves of its advantages. This is more to be regretted, as it is doubtful whether there is any class of persons to whom the school would be more practically beneficial.

"York has long been regarded as a good training school for several kinds of workmen, and I am anxious that by the assistance of this new institution it should maintain its claim to that honourable distinction.

"During forty years of my architectural experience (thirty of them spent in York) I have had numerous opportunities of noticing the very great superiority of workmen acquainted with the principles of geometry, drawing, and especially of modelling, over those who were ignorant in these respects. This superiority has been manifested not only by the readiness with which they have understood the plans from which they worked, in the saving of time by the avoidance of vexatious mistakes, and the ability and despatch with which they commenced and completed their work, but also in the advances they have made in society, and the respect they have gained from all their employers. As skilful workmen always obtain the best work and wages, so they are the last a master will part with during a deficiency of employment.

"The scarcity of workmen skilled in the execution of ornamental masonry, plastering, wood carving, and painting, and the consequent difficulty and expense of getting them properly performed, have constantly tended to prevent their introduction in buildings, and to lower the public taste.

"For this reason I consider the modelling department of the *School of Design* as one of its most valuable objects. A workman of any kind, who can form a lump of clay into a model of an intricate piece of workmanship, will be able to master almost any difficulty. Some years ago I showed a working drawing of an iron roof with ribs, by no means complicated, to a master iron founder in a neighbouring town; on examining it, he expressed his inability to undertake it, adding with great complacency, 'Give me a model and I will do it; I can cast the devil, if you will give me a model of him.' If that man had habituated himself to model, however roughly, instead of depending on others, he would not have had the disgrace of confessing his incompetency to perform a plain piece of work, and of letting it pass into other hands.

"In mentioning the advantages of an acquaintance with the scientific parts of your business, it would be unpardonable to omit the moral benefit usually derived therefrom. It induces habits of thinking, reading, and observation, furnishes occupation for leisure hours, and by substituting rational and social enjoyments renders low associations and habits, the fruitful sources of misery and ruin, distasteful.

"Could I lay before you the sad history both of masters and their men, whose downward course I have witnessed with the deepest regret, you would not wonder at my earnestness on this point, nor consider as intrusive the suggestion, 'to pass through things temporal so as finally not to lose those which are eternal.'

"Consider carefully these few lines, which I have penned with the most friendly intentions; look around and you will find ample confirmation of them in the history of your acquaintance. Visit the school—witness what is going on there, and if it should stimulate you to go and do likewise, you will never, I am sure, have cause to regret the advice given you by, Your sincere friend,

"J. P. PATCHETT.

"Lendal, April 3rd, 1843.

"P.S.—As some of you may not have seen the notices sent out by the committee, it may be well to mention that the school, which is situated in Little Blake-street, is open every evening in the week (Saturdays and Sundays excepted) from seven to nine o'clock; that the weekly payment is only sixpence; and that the master, Mr. Patterson, will be ready at any time to shew you the school, and to give you every information respecting it."

The foregoing address is by a clever and experienced architect, and is felicitously applicable in every case where *Schools of Design* are instituted. The building artificers ought to be ashamed if they do not seize the great advantages within their reach.

COMPETITION IN BUILDING.

TO THE EDITOR OF THE BUILDER.

SIR,—The present ruinous competition amongst builders appears to me to involve such an immense amount of evil, that I am desirous through the medium of the columns of *THE BUILDER* to call the attention of its readers to the subject. The consequences that inevitably ensue from such a system remain no longer problematical, but rest upon the evidence of facts; and the evils fall in an increasing ratio on the dependent classes, so that in many cases it may be literally said, that we "grind the faces" of our artisans and workmen. The reader will observe that these remarks only apply to the system of competition as it already obtains. I should rejoice if any modification of it could be adopted, that would effectually curb the spirit, that is, *poor* after inordinate profit, and (to effect that object) betraying the sacred trust of honest dealing *reposed* by the employer in the employed; that would on the other hand secure the builder an equitable compensation, and rescue him from the mean artificer too often had recourse to, in order to drive him into an unjust and vexatious arrangement as the only alternative he has to prevent the work from being given to another. I repeat that I should rejoice if it and hail the event as a special blessing conferred on the community. I am conscious that it is much easier to discover that the disease exists, than to trace it to its true origin, or to effect its eradication, and an investigation of all the bearings of the case and the contending interests concerned, would unavoidably extend these remarks beyond a proper limit. The object I have in view, is to call the reader's attention to certain abuses that have come to my knowledge to which builders are exposed, and to reprobate the conduct of those who are the agents in it; I allude to estimates being obtained for work whilst there is a secret reservation on behalf of some favoured candidate, as in this case; the time of the other builders (comparable to their capital or stock in trade) is shamefully trespassed on without their receiving any equivalent in return. I also protest against the duplicity of those who, under a false pretext of competition, obtain from a builder a tender for work—such conduct is undoubtedly a breach of good faith and a direct violation of honest dealing and the golden rule of "doing as you would be done by." I intend the foregoing remarks as cautionary as well as condemnatory, and whilst our blows are aimed at practices and not persons, there is nothing to fear, our enemies having no "local habitation." One great evil attending competition undoubtedly reverts back upon the employer; I allude to the temptation, often too strong to be resisted, which is put in the way of the builder to make use of inferior materials and to employ incompetent workmen, and also to increase the extras as much as possible in order to get a *living profit* out of the work. I would submit that if it were possible, by the united exertion of competent persons, under certain regulations, to put builders generally in possession of what ought to be the prime cost price of work, as a standard to which reference could be made, one step would be obtained in furtherance of the desired object. DELTA.

The subject brought before our notice by Delta is perhaps the most momentous of any that can engage our attention. The question of competition, contracts, and piece-work is one that requires a vigorous handling, and some moral courage; but we shall not shrink from it. We aver that we abhor it, more than we do monopoly. "Measure and value" and "day-work" is, in our mind, the only system that squares with the notions of honesty and confidence. Competition begets suspicion and fraud. It is based upon broad assumptions of fraudulent purpose—and we are determined in every practical way to grapple with it. Every honourable mind recognizes the principle that steers between the extremes of competition and monopoly. But we have no hope of any effectual change without the incorporation of the trades; give us that and trade councils, and we should hear and see less of immorality in all ranks of business. What has made our traders and manufacturers a by-word and a reproach, but the rage of competition? We are pledged to prove our case—to prove loss to the whole community—loss in every point of view from it. Incorporation of the trades, however, would regulate every detail. The major involves the minor, therefore we plead the major.—Eo.

A church, from the designs of Mr. Alexander, was built at Penrhos, in the county of Carnarvon, last year, to contain eighty sittings. Cost 2051.1 built of stone; covered with slate; dressings of gineet stone.